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10/807,654

03/24/2004

Robrt W. Stadler

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09/29/2005

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EXAMINER

LAYNO, CARL HERNANDZ

ART UNIT

PAPER NUMBER

3762

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/807,654

Applicant(s)

STADLER ET AL.

Examiner

Carl H. Layno

Carl H. Layno 9/27/05

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/18/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for priority as a Continuation of U.S. Application Serial Number 10/002,338, filed October 30, 2001, now U.S. Patent Number 6,795,732.

### ***Information Disclosure Statement***

2. Acknowledgment is made of applicant's Information Disclosure Statement (PTO-1449), which was received by the Office on October 18, 2004.

### ***Drawings***

3. Applicant's formal drawings were received by the Office on March 24, 2004 and have been approved by the Examiner.

### ***Specification***

4. The disclosure is objected to because of the following informalities:  
-p.1 of the Specification, paragraph [0002] should be updated to reflect the fact that U.S. Application Serial Number 10/002,338 is now U.S. Patent Number 6,795,732.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith '699-B1.

The Smith '699-B1 patent describes an implantable system utilizing a plurality of sonomicrometers 50,60 (Fig.3) located on different portions of the heart for sensing dimensional information useful in calculating data parameters for a pacemaker (col.2, lines 14-18 and col.10, lines 30-67). This information is used by the pacemaker to determine whether the application of pacing pulses is, or is not, appropriate (col.8, lines 57 thru col.9, line 6). In general, the sonomicrometer system devised by Smith may be used to control the operation of other

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implantable biomedical devices, particularly, ventricular assist devices (VADs), defibrillators, and drug delivery devices (col.2, lines 43-59 and col.3, lines 11-29).

In regard to claim 4, applicant's elements read upon the sonomicrometer configuration of Smith when the implantable device it controls happens to be a dual-chamber pacemaker (e.g. a DDD pacer), which would inherently deliver pacing pulses to both a patient's right atrium and right ventricle.

In regard to claims 1 and 5, applicant's attention is directed to Fig.3, which shows locations of the sonomicrometers 50,60 on different portions of the heart.

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Landesberg '422-B1 or Prem et al '773-B1

The Landesberg '422-B1 patent describes a ventricular assist device (VAD) (Fig.2) including a plurality of sonomicrometers 28 positioned at different locations in the heart, whose sensed dimensional data is used by system computers 27,26 to control the VAD motor controller 25 and syringe pump 22.

The Prem '773-B1 patent also describes a ventricular assist device (VAD) equipped with a heart caliper 500 (Fig.10a) whose sonomicrometer transducers 504,505 are located on opposite sides of the patient's heart for measuring radial dimensions of the patient's ventricles (col.12, lines 42-47). This radial dimension information is used to control the blood pump velocity of the device's centrifugal pump 51 (Fig.4). See also Figs.11 and 12 (col.13).

*Allowable Subject Matter*

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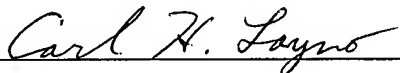
8. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl H. Layno whose telephone number is (571) 272-4949. The examiner can normally be reached on 9/4/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CARL LAYNO  
PRIMARY EXAMINER

CHL  
9/27/2005